

Scaled data based on original data using
LM-79-08 Approved Method: Electrical and Photometric Measurements of Solid-State
Lighting Products

Test Report Prepared for
Cooper Lighting Solutions
(formerly Eaton)

Brand: FAIL-SAFE

Report Number: P835068

Luminaire Tested: **ORLG-24-4-INS-OPL-LD4-2HI-27-120-EDD-90**

Issue Date: 5/16/2024

Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269

**Test Information**

Test Method: LM-79-08
Report Number: P835068
Test Lab: INNOVATION CENTER(G2)
Issue Date: 5/16/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: FAIL-SAFE
Catalog Number: ORLG-24-4-INS-OPL-LD4-2HI-27-120-EDD-90
Description: 2FT x 4FT ORL LED LUMINAIRE WITH opal acrylic lens
Light Source: 2700K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

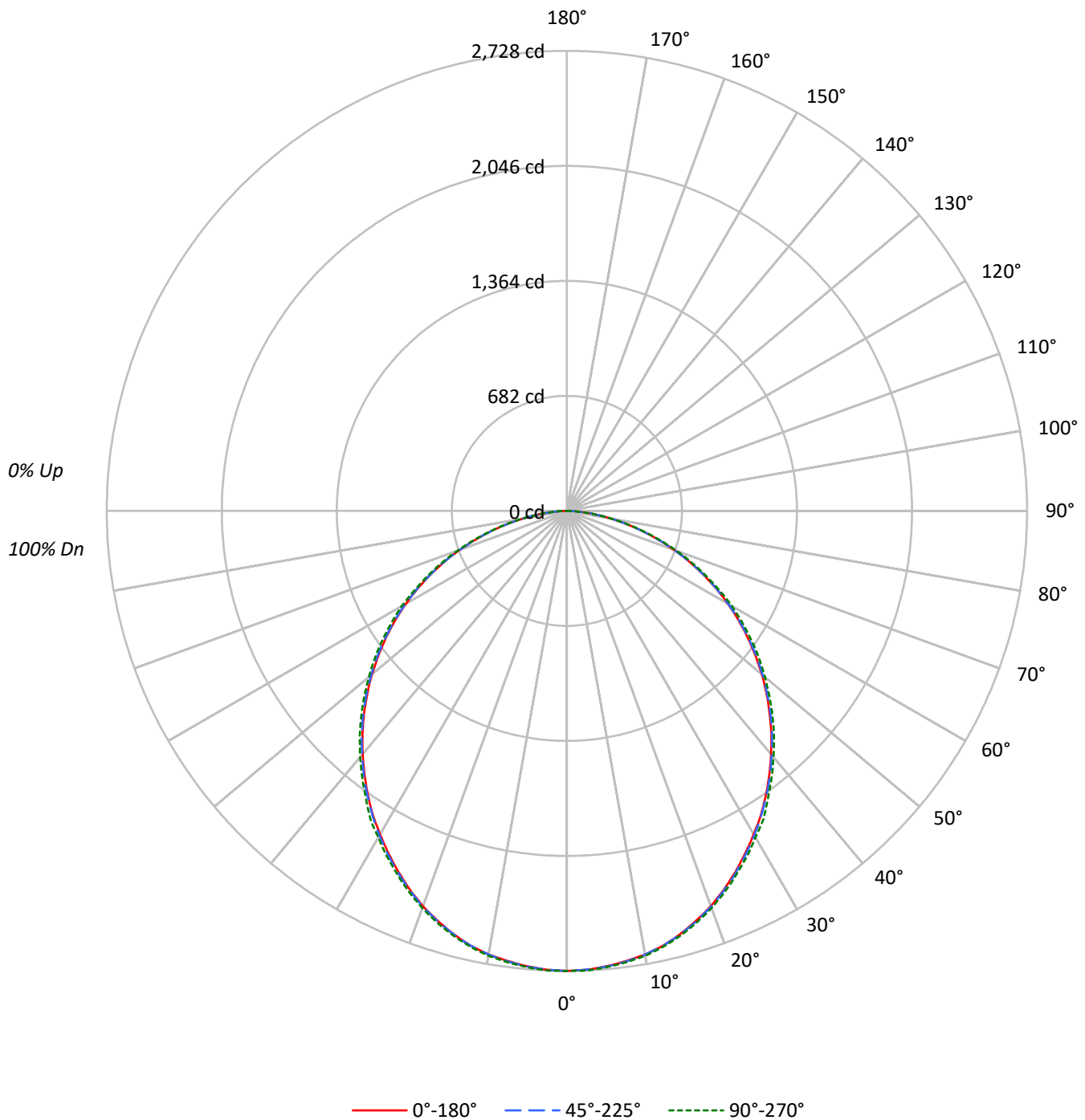
Lumens per Lamp: N/A
Luminaire Lumens: 7371.1 lumens
Efficiency: N/A
Efficacy: 83.8 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.22 / 1.33
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 88
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT

TEST NUMBER: P835068

CATALOG NUMBER: ORLG-24-4-INS-OPL-LD4-2HI-27-120-EDD-90

Luminous Intensity Polar Plot



Cooper Lighting Solutions Photometric Lab

1121 Highway 74 South

Peachtree City, GA 30269



TEST NUMBER: P835068

CATALOG NUMBER: ORLG-24-4-INS-OPL-LD4-2HI-27-120-EDD-90

COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20					20					20					20
RC	80				70					50					30					10
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10
RCR																				
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	102	102	100
1	109	104	100	96	106	102	98	95	98	94	92	94	91	89	90	88	86	86	86	84
2	99	91	84	78	96	89	83	77	85	80	76	82	78	74	79	76	72	72	72	70
3	90	80	72	65	88	78	71	65	75	69	64	73	67	62	70	65	61	61	61	59
4	83	71	62	55	80	69	61	55	67	60	54	65	58	53	62	57	53	53	53	51
5	76	63	54	48	74	62	54	47	60	53	47	58	52	46	56	51	46	46	46	44
6	70	57	48	42	68	56	48	42	54	47	41	53	46	41	51	45	40	40	40	38
7	65	52	43	37	64	51	43	37	49	42	36	48	41	36	47	41	36	36	36	34
8	61	47	39	33	59	47	38	33	45	38	33	44	37	32	43	37	32	32	32	30
9	57	43	35	30	55	43	35	30	42	34	29	41	34	29	40	34	29	29	29	27
10	53	40	32	27	52	40	32	27	39	32	27	38	31	27	37	31	26	26	26	25

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3670	3670	3670
5°	3661	3664	3668
10°	3649	3650	3661
15°	3619	3621	3631
20°	3572	3576	3589
25°	3507	3516	3532
30°	3441	3453	3474
35°	3379	3387	3414
40°	3307	3318	3348
45°	3235	3249	3282
50°	3157	3171	3207
55°	3067	3082	3132
60°	2965	2977	3044
65°	2836	2845	2898
70°	2662	2664	2722
75°	2419	2411	2466
80°	2079	2070	2105
85°	1613	1587	1596

Classified

Scaled Data Report

Cooper Lighting Solutions Photometric Lab

1121 Highway 74 South

Peachtree City, GA 30269



TEST NUMBER: P835068

CATALOG NUMBER: ORLG-24-4-INS-OPL-LD4-2HI-27-120-EDD-90

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	257.8	3.5
10°-20°	733.3	9.9
20°-30°	1091.6	14.8
30°-40°	1290.9	17.5
40°-50°	1317.8	17.9
50°-60°	1176.1	16.0
60°-70°	885.8	12.0
70°-80°	494.0	6.7
80°-90°	123.8	1.7
90°-100°	0.0	0.0
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	2082.6	28.3
0°-40°	3373.5	45.8
0°-60°	5867.4	79.6
0°-90°	7371.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	7371.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2728	2728	2728	2728	2728	
5°	2710	2716	2713	2713	2716	257
15°	2598	2601	2600	2602	2607	732
25°	2362	2365	2368	2374	2379	1088
35°	2057	2055	2062	2070	2078	1286
45°	1700	1699	1707	1716	1725	1311
55°	1308	1306	1314	1323	1335	1169
65°	891	887	894	901	910	881
75°	465	461	464	466	474	493
85°	104	102	103	102	103	125
90°	0	0	0	0	0	

Cooper Lighting Solutions Photometric Lab

1121 Highway 74 South

Peachtree City, GA 30269



TEST NUMBER: P835068

CATALOG NUMBER: ORLG-24-4-INS-OPL-LD4-2HI-27-120-EDD-90

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2727.9	2727.9	2727.9	2727.9	2727.9
2.5°	2723.4	2727.9	2722.2	2723.4	2728.4
5°	2710.4	2715.5	2712.6	2713.2	2716.0
7.5°	2692.3	2699.1	2695.1	2696.3	2699.1
10°	2670.8	2675.9	2671.4	2674.2	2679.3
12.5°	2640.3	2642.6	2640.3	2641.5	2647.1
15°	2598.0	2600.8	2599.7	2601.9	2607.0
17.5°	2548.3	2551.7	2551.1	2555.6	2559.6
20°	2494.6	2495.2	2497.5	2502.0	2506.5
22.5°	2431.4	2433.1	2435.3	2441.5	2446.1
25°	2362.5	2365.3	2368.1	2374.3	2378.8
27.5°	2289.6	2292.4	2296.4	2303.2	2310.5
30°	2215.1	2215.1	2222.4	2229.2	2236.0
32.5°	2139.9	2137.1	2143.9	2152.4	2168.8
35°	2056.9	2054.7	2062.0	2069.9	2078.4
37.5°	1970.5	1968.8	1977.3	1985.8	1993.7
40°	1883.0	1880.7	1889.2	1897.7	1906.1
42.5°	1793.2	1792.0	1800.0	1808.4	1817.5
45°	1700.0	1699.4	1707.3	1715.8	1724.8
47.5°	1605.1	1604.0	1611.9	1620.9	1628.8
50°	1508.0	1506.8	1514.7	1523.8	1532.2
52.5°	1408.0	1408.0	1415.3	1423.2	1436.2
55°	1307.5	1305.8	1313.7	1322.7	1335.1
57.5°	1205.8	1203.5	1210.9	1219.9	1231.2
60°	1101.9	1099.6	1106.4	1115.4	1131.3
62.5°	996.8	993.4	1000.2	1008.7	1018.3
65°	890.7	887.3	893.5	901.4	910.4
67.5°	783.9	780.0	786.2	792.9	801.4
70°	676.6	672.7	677.2	683.9	691.9
72.5°	569.9	565.9	569.9	572.7	582.3
75°	465.4	461.4	463.7	465.9	474.4
77.5°	363.7	359.8	364.3	365.4	370.5
80°	268.3	264.3	267.1	267.7	271.7
82.5°	181.3	177.9	181.9	179.0	182.4
85°	104.5	101.7	102.8	101.7	103.4
87.5°	41.2	39.0	39.5	37.3	37.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)